

SYSTEM AND METHOD FOR TRACKING AN OBJECT IN A VIDEO AND LINKING INFORMATION THERETO

Abstract of the Disclosure

An image processing system for use in development and playback of interactive video. In a development mode of operation, pixel or video objects are selected in a frame by way of a developmental graphical user interface. The system automatically tracks the selected pixel objects in the preceding and succeeding video frames by determining range limits for various color variables of the selected pixel object to compensate for the effects in lighting changes and decompression effects. The system automatically locates pixel objects within the calculated range limits in the preceding and succeeding video frames and generates a pixel object file which identifies the coordinates of the selected pixel object in each frame. The pixel object file is linked to a data object file which links the selected pixel objects to data objects. The pixel object file and data object file, collectively "linked video files," are created during a development mode of operation. During a playback mode of operation, the linked video files are imported to a video hosting platform which includes a video playback application and a common media player application programming interface (API) for playback of the video content. The video playback application supports processing of the linked video files to enable pixel objects to be selected by a pointing device and linked to data objects by way of a client side graphical user interface.